Dairy Its role in India

The recent achievements in the sphere of dairy and dairy product development in India depicts the extent to which the economic, social and cultural setting in India matches with the requirements of a dairy culture.

Economically much of India is still rural, with almost 76.3 per cent of its population being rural. The socio-economic realities of this vast rural sector are such that 50.70 per cent of the persons fall below the officially set poverty line, as measured in terms of per capita calory availability of 2400 units per day. Similarly the problems of unemployment and paucity of economically productive land to absorb rural peasents,among which a majority are small farmers, marginal farmers, and agricultural labourers, leads to dairying being most feasible alternative to contain their economic conditions at least in the short run.

Culturally the caring for and breeding cattle runs back to the early ages of Indian history, in which, the cow was given a sacred place in Indian society. To quote from Mahabaratha "with their milk and with Haris manufactured there from they uphold all creatures in the universe" depicts the status of the cow in Indian society. The Hindu Vedas written before 1200 B.C., mentioned the use of butter as food. The mention of milk and milk products implies the presence of dairying in the very early ages of Indian history.

This historical and cultural setting made domestication and keeping of milk producing herd animals an indispensable part of rural life. The same animals were used for work, and production of milk. The milk was consumed at the point of production both as milk or as domestically made dairy products.

Dairyingtherefore fits ideally to the prioritiesspelled out in the recent plans and strategies for rural development in India. For instance, the sixth five year plan set out the following priorities for rural development.

1. Increasing production, and productivity in agriculture and allied sectors.
2. Resources and income development of vulnerable sections of the rural population through development of primary, secondary,and tertiary sectors.
3. Provision of additional employment opportunities to the rural poor, for gainful employment, during the lean agricultural season through a rational programme.
4. Provision of essential minimum needs.
5. Skill formation and skill upgrading programmes to promote self and wage employment amongst the rural poor.
6. Facilitate adequate availability of credit to support the programme taken up for the rural poor.

Although those six priorities show a lot of overlapping, the central theme is that the rural development programmes should ensure the best utilisation of the available local resource endowments. Dairyinghas a unique feature of fitting into the bulk of those six priorities, as dairying can ensure self employment, nutrition, income upgrading, draught power, organic fertilizer, etc.

It is also true that dairying has a strong edge over the other alternatives, due to its inherent advantage of easy adaptability to the state delivery programmes covering credit, marketing, input distribution, and extension. Thus, the state institutions, show a strong inclination to select dairying indiscriminately, in their development plans. For instance, dairying is one of the most cognitive areas selected by the bankers to finance in the Intergrated Rural Development Programme (IRDP) assisted projects.

A model blindly followed by many indian states under the dairy development programme, is the Amul, or Anand Pattern, which was conceived initially in Gujarat state. The programme for replication of this model is named as "operation flood" under which a number of milk producing districts, and consuming centres scattered throughout India were proposed to be linked into a single milk producting and marketing grid.

The Anand pattern is conceived as a Village Milk Producers Co-operative in which milk producers at village level are voluntarily orgar.ized. These village level co-operatives have been made members of the district level co-operative milk producers union.

The village level Co-operative Societies are said to be open to all the milk producers within the village. At a general meeting of members, a managing committee is elected from the membership, who are responsible for the day to day operations of the society, i.e. milk collection, quality control, sale of cattle feed, price determination and the provision of auxiliary services like artifical insemination and veterinary facilities. The village level milk producers societies are linked to district unions where cattle feed plants, seman collection, veterinary services etc. are centred. The district unions have an independent board of management, elected from the affiliated unions. The dairy owned by a union has a milk drying plant, to convert the seasonal surpluses, into milk powder, and other conserved products, which helps to stabilize the price of milk during the flush seasons.

The paucity of natural feed, i.e. adequate natural pastures, made dairying in most of the states heavily dependent on preserved grass, and other artificial cattle feed concentration. Thus the price of cattle feed concentrates decides the producer margins and the economic and social profitability of dairying. The provision of cattle feed concentrates wherever possible at reasonable costs helps the poor farmers to retain a higher margin. Therefore, the role of the district union as an intermediary in providing a better farm gate price on the one hand and containing the prices of inputs like cattle feed concentrates are seen as strong points of the Anand pattern dairy model.

The replication of Anand pattern, named 'operation flood' has the twin objectives of ensuring a remunerable price to milk producers throughout the year, and providing a regular supply of milk to urban consumers at a reasonable price. This replication is designed in such a way that the conventional milk producing areas are properly linked with the major consuming centres of the country through a national 'milk grid.' The producing areas although designated as Western, Nothern, Eastern and Southern, are centered around the states of Gujarati and Maharastra in the West, Uttra pradesh and Rajastan in the North, West Bengal in the East, Andra pradesh, Tamil Nadu and Karnataka in the South. The major milk markets are the urban centres of Delhi, Bombay and Calcutta.

The poor genetic constitution of the majority of farm animals, the accute shortage of feed and fodder, the limitations imposed by the environmental conditions in certain parts of the country, inferiority of animal health cover, and marketing system in other parts are some of the major constraints that hampered Indian dairying reaching the projected targets. But this does not under value the achievements. It only attempts to evaluate the achievements in a broader perspective.

Although, Indian dairying has been successful in conquering the multinationals, the self-sufficiency achieved does not mean that milk production has achieved the overall milk requirements of the country. According to an earlier estimate the avilability of milk during the Fourth Plan period was only around 108 grams per head per day while the nutrition expert group for the ICMR recommended 300 grams of milk for pre-school children, 250 grams for school children, and 200 grams for adult man and woman and an additional 150 grams; 350 grams for expectant mothers. In the light of these estimates the present level of production will have to go a long way before real self-sufficiency is reached.

Another criticism about the Anand pattern of dairying is that it helped draw all the milk away from the villages resulting in nutritional deprivation of the rural population. Generally the rural people convert liquid milk into ghee for realizing its cash value and consume butter-milk by-products for meeting marginal nutritional requirements. Therefore even traditionally milk flowed from the rural producing areas to the urban demand centres. After the co-operatives were formed a comparatively better price was paid than by the traditional trade, and the milk flow was intensified. In a way, this lead to short term slaughter tapping on the one hand and drying of a traditional source of nutrition; perhaps the only cognitive source; for the rural producers. Studies on this unequal drain indicates different findings. Some studies have asserted that the new mechanism has compelled the rural milk producers to settle at a lower welfare equilbrium by resorting to nutritionally poor cereals and other substitutes. There is however another view point suggesting that 'operation flood' had enhanced the money income, purchasing power and the amount of milk retained at home for domestic consumption.

The average values of milk sold or retained presented by most studies depicts a distorted picture. Neither do they reveal a realistic distribution of milk retained by the poor segments of the producers vis-a-vis the rich, nor do they depict the heavy over consumption of milk and other dairy products by the urban rich vis-a-vis the urban poor. There is however, a valid argument that the consequences of 'operation flood' had put the price of milk beyond the reach of urban poor. Special provision was made to provide subsidised milk to the poorest of the poor, in the urban centres; although the extent of coverage of such a this scheme is still questionable.

Similarly questions are range regarding the extent to which the Amul and Annard pattern is subsidised through grants, loans and hidden subsidies in the form of protection etc., which would otherwise have been diverted to increase the general welfare of the consumers. It should be noted that Amul had received financial assistance to the tune of 64 per cent of its total capital cost.

Another criticism levelled against the operation flood' scheme has been the adverse effects created by it due to its strong dependence on food aid. It is sometimes alleged that the due to this food aid milk production in India had become highly dependent on imported milk. This has often been linked with the wider gaps seen between the achievements and targets of operation flood. The places in which most achievement had been shown are those non-priority areas like the number of societies established, number of plants set up, staff recruited or, the sophisticated machines installed which have indirect links with the real production matrix.

In spite of all these real and supposed drawbacks, dairying and dairy products development in India had completed a long journey during which the production level, pricing, marketing and technology have produced a model different from most of the other milk producing countries.